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(12) United States Patent

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(54)	METHOD FOR A SHORT-TERM WELL
	OPERATION BY MEANS OF AN
	ELECTRICALLY-POWERED SUBMERSIBLE
	PUMPING UNIT (KUZMICHEV METHOD)

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See application file for complete search history.

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(57) ABSTRACT

A method of short-term well operation using a submersible impeller pump unit is disclosed, the method includes the steps of alternating pumping a liquid out of a well and accumulating a liquid in the well, and adjusting an average integral-intime capacity of the unit by changing a proportion between time intervals of pumping the liquid out and accumulating the liquid. The method further includes adjusting a pressure produced by the unit during the time interval of pumping the liquid out of the well, selecting a time interval of a complete operational cycle of the unit to have a production rate reduction factor greater than 0.95 as compared to continuous well operation, and selecting a factor of cyclic time interval of unit-turning-on equal to a ratio of the time intervals of pumping the liquid out and the complete operational cycle of the unit such that the factor is less than 50%.

1 Claim, 2 Drawing Sheets

